

302 KAR 37:010. Standard Hay Grading Program.

RELATES TO: KRS 260.010

STATUTORY AUTHORITY: KRS 260.033

NECESSITY, FUNCTION, AND CONFORMITY: To define terms used in the administration of the Kentucky Standard Hay Grading Program and establish methods of sampling, testing and grading hay to be applied to the Kentucky Standard Hay Grading Program.

Section 1. Terms used in the administration of the hay marketing law and administrative regulations and not otherwise defined shall have the following meaning:

- (1) The term "acid detergent fiber" means the portion of hay that is highly indigestible.
- (2) The term "available protein" means an adjustment in crude protein value determined by subtracting the degree of heat damage from the crude protein level.
- (3) The term "crude protein" means the portion of hay that contains true protein and nonprotein nitrogen.
- (4) The term "department" means the Kentucky Department of Agriculture.
- (5) The term "digestible dry matter" means the estimated percent of hay that is digestible.
- (6) The term "dry matter" means the portion of hay which is not water.
- (7) The term "dry matter intake" means an estimate of the maximum amount of hay a lactating cow will eat.
- (8) The term "grading" means to classify hay by its relative feed value and physical characteristics.
- (9) The term "hay" means grass, alfalfa, clover or other forage crops cut and dried for use as livestock feed.
- (10) The term "heat damage protein" means the portion of hay chemically linked to carbohydrates to form an indigestible compound.
- (11) The term "injurious foreign material" means anything which has infected hay to make it undesirable or unfit to eat, such as noxious weeds, rocks, wires, or glass matter.
- (12) The term "kind" means one (1) or more related species or subspecies which singularly or collectively is known by one (1) common name, for example, alfalfa, red clover and timothy.
- (13) The term "lot" means hay taken from the same cutting at the same stage of maturity, the same kind, the same field and harvested within forty-eight (48) hours.
- (14) The term "mold" means a downy growth on the surface of hay caused by the presence of dampness or decay.
- (15) The term "neutral detergent fiber" means the portion of hay that is only partially digestible and limits intake.
- (16) The term "probe" means a hollow, metal tube used to extract samples from hay.
- (17) The term "relative feed value" means a combination of digestible dry matter and dry matter intake that is used to evaluate the feed value of hay under a calculation of multiplying the percentage of digestible dry matter times the percentage of dry matter intake and then dividing that number by 1.29.
- (18) The term "sampler" means an individual who takes samples of hay for testing.
- (19) The term "total digestible nutrients" means the digestible components of fiber, protein, fat and nitrogen-free extract in the diet.
- (20) The terms used in reference to mineral content in hay shall be the official feed terms adopted by the Association of American Feed Control Officials and published in its official publication.

Section 2. The method of sampling hay shall be the following:

- (1) For rectangular bales, probe shall be inserted in the end of the bale at a point approximately

one-half (1/2) the distance from the center to the outside of the bale and drilled or pushed horizontally at least eleven (11) inches into the bale.

(2) For round bales, probe shall be inserted in the end of the bale at a point approximately one-half (1/2) the distance from the center to the outside of the bale and drilled or pushed at least eleven (11) inches into the bale.

(3) At least twenty (20) bales shall be sampled and composited to develop one (1) sample per lot. If a lot contains less than twenty (20) bales, all bales shall be sampled.

(4) Bales within a lot of hay shall be sampled at random by taking into account vertical and horizontal positions within the lot.

(5) Each bale sampled shall be tagged or marked with colored chalk or vegetable dye.

(6) Samples from a lot of hay shall be composited and placed in a plastic freezer bag and sealed tightly.

(7) The department shall keep samples from a lot of hay for a period of at least one (1) year.

Section 3. The testing of hay shall be performed by procedures adopted by the National Alfalfa Hay Testing Association and published at page 17 in its "Hay Testing Laboratory Certification Manual, Publication No. 2, February 10, 1986," which is hereby adopted by reference. A copy of the Hay Testing Laboratory Certification Manual may be obtained at the Division of Hay and Grain, 106 West Second Street, Frankfort, Kentucky 40601. The manual may be inspected or copied at the above address between the hours of 8 a.m. to 4:30 p.m., Monday through Friday.

Section 4. The grading of hay shall be based on the findings of a test performed by Near Infrared Reflectance Spectroscopy, or any other procedure which has the approval of the Association of Official Agricultural Chemists, and the test result shall include analysis under the categories of "As Received Basis" and "Dry Matter Basis" of the following:

- (1) Moisture;
- (2) Dry matter;
- (3) Crude protein;
- (4) Heat damaged protein;
- (5) Available protein;
- (6) Digestible protein;
- (7) Acid detergent fiber;
- (8) Neutral detergent fiber;
- (9) Relative feed value;
- (10) Phosphorous (P);
- (11) Calcium (Ca);
- (12) Potassium (K);
- (13) Magnesium (MG).

Section 5. The grading of hay also shall be based on a physical description of the hay provided by those who take samples for testing; the description shall be listed on the test result and shall include the following:

- (1) Color;
- (2) Foreign material;
- (3) Injurious foreign material;
- (4) Odor;
- (5) Mold.

Section 6. Testing results shall be stated in a uniform manner as prescribed by the department.

Section 7. The grade of "Triple Crown" shall apply to hay in which the physical description is "light green", "green" or "dark green" in color, the odor is "fresh" and there is no mold and no injurious foreign material that is identifiable by a visual inspection.

Section 8. The grade "Kentucky Pride" shall apply to hay in which the test analysis for crude protein exceeds fourteen (14) percent on a dry matter basis and the test analysis for relative feed value exceeds 124 and the physical description indicates no visible injurious foreign material.

Section 9. The grade "Kentucky Feeder" shall apply to hay in which the test analysis for crude protein is between eight (8) percent and fourteen (14) percent or the test analysis for relative feed value is between seventy-five (75) and 124 and the physical description includes no visible injurious foreign material.

Section 10. No grade shall be applied to hay that is not graded as "Triple Crown" or "Kentucky Pride" or "Kentucky Feeder."

Section 11. All hay testing laboratories used in the Kentucky Standard Hay Grading Program may annually run a series of samples which will then be analyzed by wet chemistry by the University of Kentucky, College of Agriculture, Department of Agronomy to insure consistent readings for Kentucky forages.

Section 12. All persons who take samples of hay for testing under the Kentucky Standard Hay Grading Program shall be certified by the department and shall receive a certification card issued by the department after having successfully completed the following:

(1) The taking of samples from ten (10) lots of hay according to the procedures outlined by the National Hay Association in its publication at page 9, "Hay Testing Laboratory Certification Manual, Publication No. 2, February 10, 1986."

(2) At least forty (40) hours of instruction, from the director of the department's Hay and Grain Division or a person who has been certified to sample, on properly recognizing the physical characteristics (color, mold, foreign material, type, stage of maturity) of hay.

Section 13. Upon application to the department, individuals who want to take samples of hay on behalf of hay growers' associations and cooperatives may be certified by the department and issued a certification card.

Section 14. The department may allow laboratories that are certified by the National Hay Association to test hay under the guidelines of the Kentucky Standard Hay Grading Program.

Section 15. The director of the department's Hay and Grain Division or the Commissioner of Agriculture may revoke certification of samplers and laboratories which do not follow the sampling and testing procedures of the Kentucky Standard Hay Grading Program. Certification may be revoked for failure to follow the procedures and requirements outlined in this administrative regulation, provided that the certification holder is given ten (10) days written notice of the reason for revocation.

Section 16. Any party aggrieved by a notice of revocation of certification may appeal the department's decision to revoke the certification by filing an appeal with the Department of Agriculture, Division of Hay and Grain, within ten (10) days of the date of notification of revocation.

(1) There will be a hearing committee available within the Division of Hay and Grain at all times to

hear complaints by aggrieved parties and to decide whether to revoke a certification for violation of procedures or requirements set forth in the administrative regulations.

(2) The hearing committee will hear each appeal and rule upon each cause for revocation.

Section 17. Hay that is sampled and tested shall be stored in the Commonwealth of Kentucky.

(1) Hay that is sampled and tested shall have recorded by the department the date of cutting and the date of sampling.

(2) Hay that is sampled and tested shall be grouped in a lot that does not exceed a weight of fifty (50) tons.

(3) Upon application by a producer, a second test on a "lot" of hay shall be performed under the following guidelines: A certified sampler who did not take the first sample from the lot of hay shall take the second sample from at least the bales that were previously sampled and tagged or marked with colored chalk.

Section 18. Within ten (10) working days after a sample is taken, the department or any laboratory certified by the department to test hay shall mail to the producer an analysis report containing the test results, an identification of the hay's producer and type of hay and its location and the date the hay was tested.

(1) The most recent analysis report on a lot of hay shall be the report of record.

(2) The department or any laboratory certified by the department to test hay shall keep for a period of one (1) year, records of the analysis report for each lot of hay tested.

Section 19. If hay meets the requirements for the grades of "Triple Crown", "Kentucky Pride," or "Kentucky Feeder", the department or any laboratory certified by the department to test hay shall affix a label to the analysis report indicating that the hay is graded as such.

Section 20. Individuals who are certified to take samples of hay for testing under the Kentucky Standard Hay Grading Program shall collect a fee of ten (10) dollars for each lot of hay sampled and tested at the time the hay is sampled for testing. The ten (10) dollar fee shall be refunded to the producer if the hay is not tested within ten (10) working days after the hay is sampled. (15 Ky.R. 2127; Am. 2224; eff. 4-26-89; 20 Ky.R. 605; 680; eff. 10-27-93.)